

(19) 世界知的所有権機関  
国際事務局



(43) 国際公開日  
2003 年 3 月 6 日 (06.03.2003)

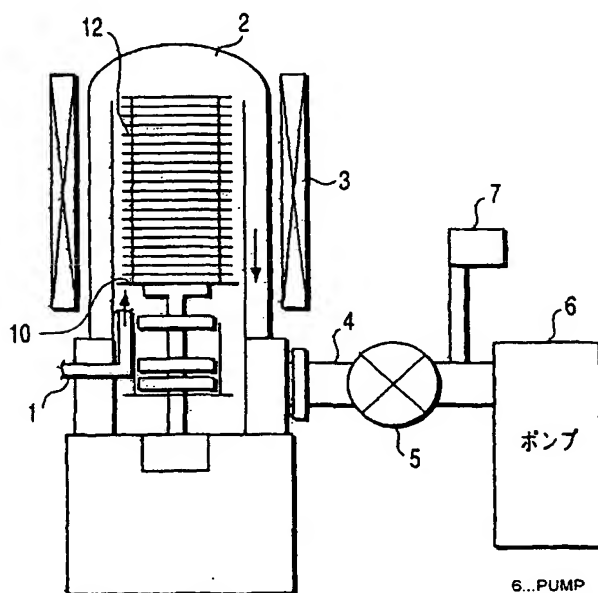
PCT

(10) 国際公開番号  
WO 03/019634 A1

- (51) 国際特許分類<sup>7</sup>: H01L 21/205, C23C 16/44 (MIZUSHIMA, Ichiro) [JP/JP]; 〒240-0015 神奈川県横浜市保土ヶ谷区 岩崎町 20-1-307 Kanagawa (JP).
- (21) 国際出願番号: PCT/JP02/08742
- (22) 国際出願日: 2002 年 8 月 29 日 (29.08.2002) (74) 代理人: 鈴江 武彦, 外 (SUZUYE, Takehiko et al.); 〒100-0013 東京都千代田区 霞が関 3 丁目 7 番 2 号 鈴栄特許綜合法律事務所内 Tokyo (JP).
- (25) 国際出願の言語: 日本語
- (26) 国際公開の言語: 日本語 (81) 指定国 (国内): CN, KR, US.
- (30) 優先権データ:  
特願2001-262295 2001 年 8 月 30 日 (30.08.2001) JP (84) 指定国 (広域): ヨーロッパ特許 (DE, FR, GB).
- (71) 出願人 (米国を除く全ての指定国について): 株式会社 東芝 (KABUSHIKI KAISHA TOSHIBA) [JP/JP]; 〒105-8001 東京都港区 芝浦一丁目 1 番 1 号 Tokyo (JP). 添付公開書類:  
— 国際調査報告書
- (72) 発明者: および 2 文字コード及び他の略語については、定期発行される各 PCT ガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。
- (75) 発明者/出願人 (米国についてののみ): 水島 一郎

(54) Title: PURGING METHOD FOR SEMICONDUCTOR PRODUCTION DEVICE AND PRODUCTION METHOD FOR SEMICONDUCTOR DEVICE

(54) 発明の名称: 半導体製造装置のパージ方法及び半導体装置の製造方法



(57) Abstract: A purging method for a semiconductor production device comprising the step of etching, by a cleaning gas containing at least halogen gas, a CVD deposit film deposited in a chamber (2) constituting a semiconductor production device that has formed a CVD film on a semiconductor wafer (12) by a CVD method, and the step of purging, after the step of etching the above CVD deposit film by a cleaning gas, a cleaning gas remaining in the chamber (2) by passing a hydrogen-containing gas through the chamber (2).

[続葉有]



WO 03/019634 A1

**WO 03/019634RNATIONAL SEARCH REPORT**

 International **PCT/JP02/08742**  
**PCT/JP02/08742**

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> Int.Cl <sup>7</sup> H01L21/205, C23C16/44										
According to International Patent Classification (IPC) or to both national classification and IPC										
<b>B. FIELDS SEARCHED</b>										
Minimum documentation searched (classification system followed by classification symbols) Int.Cl <sup>7</sup> H01L21/205, 21/306, 21/3065, C23C16/44										
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Jitsuyo Shinan Koho</td> <td style="width: 16%;">1922-1996</td> <td style="width: 33%;">Toroku Jitsuyo Shinan Koho</td> <td style="width: 18%;">1994-2002</td> </tr> <tr> <td>Kokai Jitsuyo Shinan Koho</td> <td>1971-2002</td> <td>Jitsuyo Shinan Toroku Koho</td> <td>1996-2002</td> </tr> </table>			Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-2002	Kokai Jitsuyo Shinan Koho	1971-2002	Jitsuyo Shinan Toroku Koho	1996-2002
Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-2002							
Kokai Jitsuyo Shinan Koho	1971-2002	Jitsuyo Shinan Toroku Koho	1996-2002							
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)										
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>										
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.								
X	JP 6-163485 A (Kyocera Corp.), 10 June, 1994 (10.06.94), Par. Nos. [0023] to [0026], [0036] (Family: none)	1-4, 17								
X	JP 1-152274 A (Iwatani & Co., Ltd.), 14 June, 1989 (14.06.89), Full text (Family: none)	1-4, 17								
X	JP 5-259133 A (Fujitsu Ltd.), 08 October, 1993 (08.10.93), Full text (Family: none)	5-7, 18								
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.										
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family									
Date of the actual completion of the international search 26 November, 2002 (26.11.02)		Date of mailing of the international search report 10 December, 2002 (10.12.02)								
Name and mailing address of the ISA/ Japanese Patent Office		Authorized officer								
Facsimile No.		Telephone No.								

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP02/08742

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5963834 A (Tokyo Electron Ltd.), 05 October, 1999 (05.10.99), Claims & JP 10-189488 A Claims	5-8, 18
Y	JP 63-70428 A (Anelva Corp.), 30 March, 1988 (30.03.88), Full text (Family: none)	5-8, 18
X	JP 2-190472 A (Iwatani & Co., Ltd.), 26 July, 1990 (26.07.90), Full text (Family: none)	9-16, 19, 20
A	US 5609721 A (Fujitsu Ltd.), 11 March, 1997 (11.03.97), Full text & JP 08-88177 A Full text	1-20